DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-020547
Date Inspected: 11-Feb-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC)

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: Shao Jian Yuan and Li Yan Hua

Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ Yes	☑ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

CWI Present: ☑ Yes ☐ No

Bridge No: 34-0006
Component: OBG Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Bay # 14 and at Bay # 16.

OBG Trial Assembly: Segment 12AW

This QA Inspector performed Dimension Control Inspection for the Segment 12AW.

The Floor Beam (FB) flatness were verified and measured from East and West side of the FB at Panel Points (PP) 109. The QA Inspector measured the flatness using 1500mm Straight Edge at the following locations.

Counter Weight side: At locations A, B, C, D, E, F, G, H and I.
Cross Beam side: At locations A', B', C', D', E', F', G', H' and I'.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Bay # 14: Segment 14 West

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3020D-061. The welder identification was 067949 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB. The piece mark was identified as the weld connecting the Floor Beam identified as FB3343 to Longitudinal Diaphragm LD3051A at PP 128.3.

Bay # 14 - Segment 13BW

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3014D-350. The welder identification was 045227 and 067888 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB. The piece mark was identified as the weld connecting the Deck Panel Diaphragm to Floor Beam at PP 121.5.

Bay # 14 - Segment 13BW

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3014B-021. The welder identification was 201583 and 066695 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB. The piece mark was identified as the weld connecting the Deck Panel Diaphragm to Floor Beam at PP 122.

Bay # 14: Segment 14 West

This QA Inspector observed the repair welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3019D-323. The welder identification was 066422 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-345-SMAW-2G(2F)-FCM-Repair-1. The piece mark was identified as the weld connecting Bottom Panel. ZPMC performed repair welding in accordance with Critical Welding Report B-CWR-2678.

Bay # 16 (Bottom Plate for Lift 14)

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as BP3095-001-025. The welder identification was 067752 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB. The piece mark was identified as the weld connecting Stiffener to the Bottom Plate for Lift 14 East.

Bay # 16 (Bottom Plate for Lift 14)

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as BP3095-001-007/008. The welder identification was 067752 and observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB.

The piece mark was identified as the weld connecting Stiffener to the Bottom Plate for Lift 14 East.

Please reference the pictures attached for more comprehensive details.

Bay # 14: Segment 14 East

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as DP3160-001-003. The welder identification was 066439 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2232-ESAB. The piece mark was identified as weld connecting Deck Panel to the Longitudinal Diaphragm.

Please reference the pictures attached for more comprehensive details.

Bay # 14: Segment 14 East

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as DP3171-001-408/409. The welder identification was 048433 and observed welding in the 3F (Vertical) position using approved Welding Procedure Specification WPS-B-T-2133-ESAB. The piece mark was identified as weld connecting Deck Panel to the Diaphragm.

Please reference the pictures attached for more comprehensive details.

Bay # 14: Segment 14 East

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3019BB-157. The welder identification was 066763 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-ESAB. The piece mark was identified as the weld connecting the Vertical Shear Plate sub assembly to Anchorage Plate.

Please reference the pictures attached for more comprehensive details.

Bay # 14: Segment 14 East

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as Seg3019L-054. The welder identification was 067520 and observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132-ESAB. The piece mark was identified as the weld connecting the Vertical Shear Plate sub assembly to Anchorage Plate.

Please reference the pictures attached for more comprehensive details.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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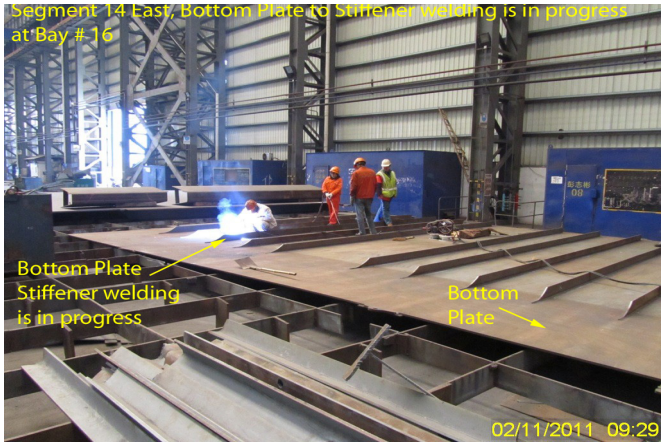

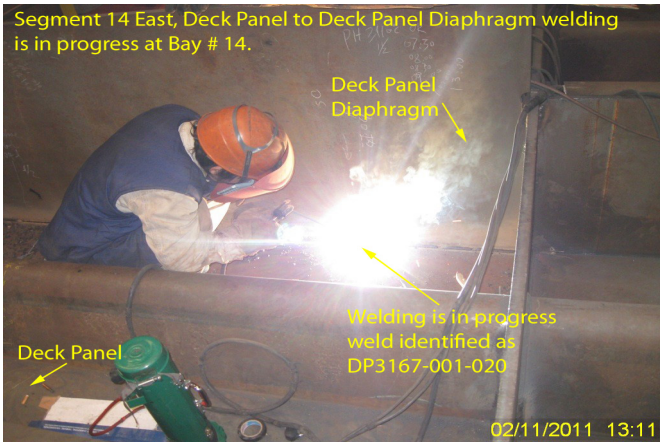

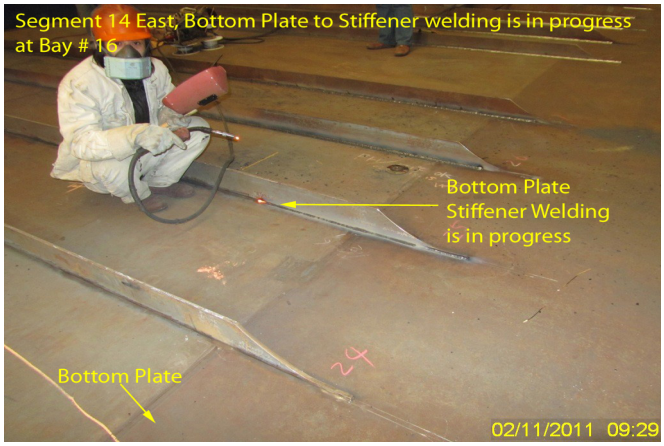

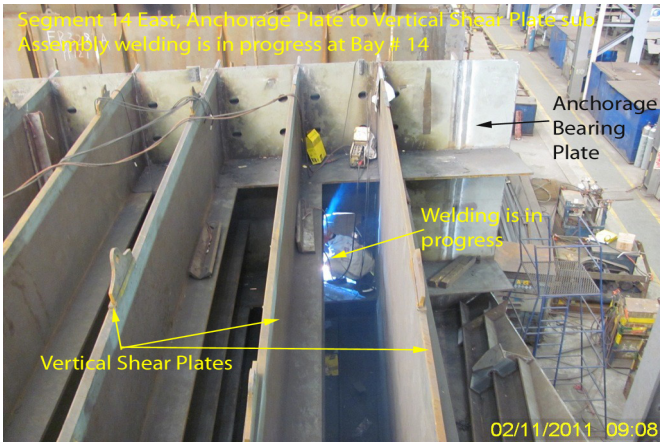

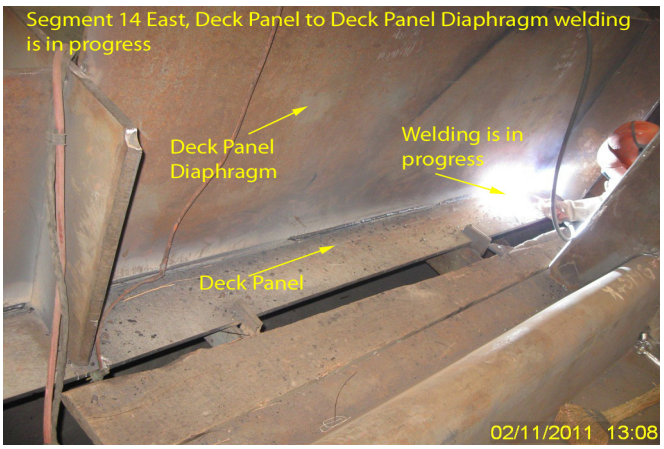

Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

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Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Dsouza,Christopher	QA Reviewer